DRAFT
Parlier Local Advisory Group
Meeting Minutes , March 8, 2007

LAG members present: Rick Milton, Tom Vitali, Lou Martinez, Jenny Saklar (alternate for Carolina Simunovic), Teresa DeAnda, Rey Leon, Karen Francone, Raul Gaona, Vern Peterson, Harold McLarty

Facilitator: Lydia Martinez

DPR staff: Veda Federighi, Pam Wofford, Randy Segawa, Jay Schreider, Leonard Herrera, Clarice Ando

Introductions and announcements: As a result of DPR personnel changes, Veda introduced Pam Wofford as the new project manager. Randy will still be involved in the project. Veda announced two meetings of the California Environmental Justice Advisory Committee (CEJAC), on April 16 and on May 31. Community members will be invited to meetings to provide feedback on Cal/EPA's EJ pilot projects. Veda said she expected that DPR's pilot project would be discussed at the May 31 meeting. (To be discussed at the April 16 CEJAC meeting are the precaution and cumulative risk pilot projects, along with two projects conducted by the State Water Board.) DPR will pay travel expenses for any LAG member who wants to speak at the May 31 meeting. She will send more details when they become available. She noted that Parlier LAG member Teresa DeAnda is also on CEJAC.

Monitoring by DPR: Monitoring results through December are now available. DPR has begun a full evaluation of the data, but the evaluation won't be complete until late this year. Pam presented DPR's complete monitoring results; complete ARB and APCD monitoring data will be available at a later date, and will be posted on DPR's Web site. The LAG will be notified when the data are available.

For this project, DPR collected 468 samples to be tested for multiple pesticides and 468 samples for MITC. There were few differences in results and detections since the second progress report. Changes include the detection of one additional pesticide– malathion, and more frequent detections of MITC, increasing from 75% to 84% of the samples. (MITC is a breakdown product of several soil fumigant products, including metam-sodium.) During the year, 23 pesticides were detected in one or more samples. In response to a question, none of the ground water samples DPR collected contained detectable residues.

Pam discussed Table 1, containing a summary of the maximum air concentrations detected and the screening levels. Jay provided an explanation of the screening levels. He explained that enforceable state or federal health standards have not been established for most pesticides in air. In these types of projects, DPR typically develops health screening levels for each pesticide to help determine when it may be prudent to evaluate potential health effects of chemical exposure.

By itself, a screening level does not indicate the presence or absence of a hazard, but detections above a screening level point to a need for further evaluation.
Diazinon was the only pesticide that exceeded its screening level, on one day out of 365 in the year. Vern commented that he believes that when diazinon exceeded its screening level in July, there are no ag applications, and it could be due to home use. Teresa commented that monitoring occurred 3 days/week, so 365 days were not sampled. In response to a question, Jay described how longer term (subchronic) exposures are estimated from the individual samples. Randy described how diazinon is an insecticide used mainly in the winter on orchards as a dormant spray. However, there are agricultural uses throughout the year.

Jenny described a University of California, San Francisco, conference presentation about low exposures and how the dose-response curve can be U-shaped. Jay commented that this effect is sometimes seen with chemicals that are endocrine disruptors and cause hormonal effects, but not with organophosphates, such as diazinon. Jay also noted that no endocrine disruptors had been detected. (*NOTE: a typical dose-response curve shows increasing effects with increasing dose or exposure. A U-shaped dose-response curve refers to a situation where increasing effects can be seen with decreasing exposure*).

In response to a question about the evaluation of data, Veda described how DPR is continuing to evaluate the data, with the assistance from the project's Technical Advisory Group. The draft report will be peer reviewed.

An audience member asked why Parlier was chosen rather than their community. Pam described how Parlier was selected based on various community EJ factors such as number of children, number of minorities, and income, as well as other factors to evaluate cumulative impacts and pesticide use. The monitoring data will be valuable for other communities that have similar cropping and pesticide use patterns to Parlier.

An audience member asked if pesticides could get into ground water from the air. Randy replied that DPR studies have shown that pesticides that get into ground water are those that are directly applied to the soil and watered in, that pesticides do not go from the air to ground water.

Pam discussed Table 2 and the figures, containing a summary of how frequently each pesticide was detected. Pointing to the three groupings of pesticides on Table 2, she noted that all the detected pesticides had reported use in agriculture. (There were 11 pesticides in this category, with reported use and detections.) An additional five pesticides with reported use had no detections.

Teresa DeAnda asked if gibberellic acid was monitored. The response was that because of its chemical nature, it cannot be included in the multi-chemical screen, and was not brought up as a

candidate for the single chemical analyses. For that, the LAG selected MITC as the target chemical.

There was a discussion about MITC, including its main health effects as an eye and lung irritant, and how its key uses are to treat soil for weeds and plant diseases in carrots and tomatoes. In response to a question about combined effects, Jay discussed how chorpyrifos and diazinon will drive the risk estimates because they are the pesticides found most frequently near or above their screening levels.

The group had a discussion about the magnitude of concentrations detected, with most detections in the parts per trillion range (1000x lower than parts per billion). Harold commented on the need to figure out the source of the pesticides detected and that it may not be due to ag use. Jenny commented that it only takes a little bit of oil to contaminate 1,000,000 gallons of water. Pam mentioned that DPR had checked with the school district and that it had not used diazinon or chlorpyrifos. Veda added that the home uses of both pesticides have been phased out for two years or more.

Pam discussed the figures showing pesticide concentrations by monitoring location (school). As part of its in-depth evaluation, DPR will evaluate wind direction and reported use relative to the detected concentrations.

There were some errors in the tables showing the ARB monitoring data of the second progress report. Pam described which pages should be replaced in the copies that the LAG and audience members had in hand. (The online reports will be corrected as well.)

Teresa DeAnda asked that public participation opportunities be maximized at the next meeting, by providing simultaneous interpreters for Spanish-speaking community members who attend. Veda replied that this would be done. Veda asked Teresa and other LAG members if they thought that the next meeting should be longer than two hours, to allow people more time to speak. Teresa and others said no, that if interpreters were available, two hours would be enough. It was agreed that the next meeting would be from 6 p.m. to 8 p.m., as usual.

An audience member, Laurel Firestone of the Community Water Center, spoke briefly. She stated that her group believed that there were an insufficient number of ground water samples taken to do a cumulative risk evaluation of community exposure to pesticides, and that those samples were not tested for enough pesticides. She presented a letter from her group and other community groups asking that the Department take additional ground water samples and test them for all 116 pesticides on the ground water protection list. Veda said that the Department would reply to the letter and that a copy of the reply would be sent to the LAG. Teresa DeAnda said that in retrospect, she regretted not being more forceful in requesting additional ground

water sampling when the LAG was reviewing and discussing the project protocol in mid-2005, before monitoring began.

Future Agenda Items and Meeting Schedule: Veda said that while most LAG meetings had focused on the air and other monitoring being done for the project, an important part of the project was the pest management assessment. Pat Matteson, a scientist from DPR's Pest Management and Planning unit, has been interviewing farmers, pest control advisors and others on the pest pressures growers face and how they deal with them, with an emphasis on least-toxic pest management practices. A similar study done in Lompoc prompted DPR to get a federal grant to do outreach to growers to ensure they all had the information of reduced-risk practices that were being used successfully in the area.

The pest management assessment is expected to be released in mid-summer, Veda said. Pat Matteson would like to come talk to the LAG about the study, and the next meeting will be after its release, in August or September.